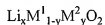


IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A lithium secondary battery comprising:
a positive electrode including a positive electrode active material;
a negative electrode including a negative electrode active material; and
a non-aqueous electrolyte,
wherein said positive electrode active material comprises at least one lithium-containing composite oxide represented by the following general formula:



where M^1 and M^2 are different elements, M^1 is Ni or Co, M^2 is at least one selected from Ni, Co, Mn, Mg, and Al, $1 \leq x \leq 1.05$, and $0 \leq y \leq 0.7$,

said negative electrode active material comprises at least one selected from the group consisting of silicon, tin, a silicon-containing alloy, and a tin-containing alloy, [[and]]
~~at least one of said positive electrode, said negative electrode, and said non-aqueous~~
electrolyte includes an organic peroxide, ~~wherein said organic peroxide is included in said non-aqueous electrolyte,~~

said organic peroxide accounts for 0.1 to 5 % by weight of said non-aqueous electrolyte,
and

said organic peroxide is at least one selected from the group consisting of hydroperoxides, ~~dialkylperoxides, peroxy esters, diacylperoxides,~~ peroxyketals, and ketone peroxides.

2-4. (Cancelled)

5. (Currently amended) The lithium secondary battery in accordance with claim 1, wherein said organic peroxide is further included in said negative electrode.

6. (Original) The lithium secondary battery in accordance with claim 1, wherein said negative electrode active material comprises a silicon-containing alloy.

7. (Original) The lithium secondary battery in accordance with claim 6, wherein said silicon-containing alloy comprises: a solid solution including silicon and at least one transition metal element selected from the group consisting of Ti, Ni, Co, Fe, and Cu; or an alloy including silicon and at least one intermetallic compound selected from the group consisting of TiSi_2 , TiSi , CoSi_2 , CoSi , FeSi_2 , FeSi , NiSi_2 , NiSi , and Cu_3Si .

8. (Original) The lithium secondary battery in accordance with claim 7, wherein said intermetallic compound is TiSi_2 .

9. (New) The lithium secondary battery in accordance with claim 1, wherein said organic peroxide is further included in said positive electrode.

10. (New) The lithium secondary battery in accordance with claim 5, wherein said organic peroxide is further included in said positive electrode.

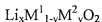
11. (New) A lithium secondary battery comprising:

a positive electrode including a positive electrode active material;

a negative electrode including a negative electrode active material; and

a non-aqueous electrolyte,

wherein said positive electrode active material comprises at least one lithium-containing composite oxide represented by the following general formula:



where M^1 and M^2 are different elements, M^1 is Ni or Co, M^2 is at least one selected from Ni, Co, Mn, Mg, and Al, $1 \leq x \leq 1.05$ and $0 \leq y \leq 0.7$,

said negative electrode active material is at least one selected from the group consisting of silicon, tin, a silicon-containing alloy, and a tin-containing alloy,

said negative electrode includes an organic peroxide, and

said organic peroxide is at least one selected from the group consisting of hydroperoxides, peroxyketals, and ketone peroxides,

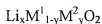
12. (New) A lithium secondary battery comprising:

a positive electrode including a positive electrode active material;

a negative electrode including a negative electrode active material; and

a non-aqueous electrolyte,

wherein said positive electrode active material comprises at least one lithium-containing composite oxide represented by the following general formula:



where M^1 and M^2 are different elements, M^1 is Ni or Co, M^2 is at least one selected from Ni, Co, Mn, Mg, and Al, $1 \leq x \leq 1.05$ and $0 \leq y \leq 0.7$,

said negative electrode active material is at least one selected from the group consisting of silicon, tin, a silicon-containing alloy, and a tin-containing alloy,

said positive electrode includes an organic peroxide, and

said organic peroxide is at least one selected from the group consisting of hydroperoxides, peroxyketals, and ketone peroxides.